# BRUHATH BENGALURU MAHANAGARA PALIKE
## Yelahanka Division, Yelahanka Zone

Executive Engineer
Yelahanka Division
B.B.M.P Bangalore 64
No:EE/YNK-D/E-PMT/01/2021-22 Dated: 21-04-2021

## APPROVED SCHEDULE - 'B'

Item No- 05

**Name of Work:-Improvements to roads and foothpaths at yelahanka new town 4th phase 5th phase and Industrial areas in ward no 03 of Yelahanka new town sub division (Package No 14)**

| Sl | Description of work | Unit | Approved Qty | Rates Quoted by the | |
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| | | | | In Figures | Amount |
| 1 | Removing and refixing stone slabs of drains and pointing in CM | Sqm | 2076.42 | 116.81 | One Hundred Sixteen Paise EightyOne Only |
| 2 | KSRRB300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. | Cum | 3844.17 | 225.94 | Two Hundred TwentyFive Paise NinetyFour Only |
| 3 | KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. | Cum | 1186.31 | 5961.80 | Five Thousand Nine Hundred SixtyOne Paise Eighty Only |
| 4 | KSRRB M2200-6. Providing TMT Bars Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in postion, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification | Tonne | 113.40 | 84113.86 | EightyFour Thousand One Hundred Thirteen Paise EightySix Only |
| 5 | Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM compléte as per specification. | Cum | 1837.21 | 7790.43 | Seven Thousand Seven Hundred Ninety Paise FourtyThree Only |

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| 6 | Providing and Fixing pre cast covering Slab 100mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. | Sqm | 2566.14 | 2452.68 | Two Thousand Four Hundred FiftyTwo Paise SixtyEight Only |
| 7 | KSRB 5-8.2 : Providing two line dressing to granite stone slab / granite stone masonry as per specifications. | Sqm | 2076.42 | 1663.14 | One Thousand Six Hundred SixtyThree Paise Fourteen Only |
| 8 | Providing and fixing RCC precast cover slab of 250mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. | Sqm | 245.40 | 5686.19 | Five Thousand Six Hundred EightySix Paise Nineteen Only |
| 9 | Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. | Nos | 9853.00 | 453.89 | Four Hundred FiftyThree Paise EightyNine Only |
| 10 | Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6 | Sqm | 1330.20 | 89.00 | EightyNine Only |
| 11 | KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1km and complete as per specifications. | Cum | 221.87 | 67.11 | SixtySeven Paise Eleven Only |

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| 12 | Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision. | Cum | 115.95 | 2093.67 | Two Thousand NinetyThree Paise SixtySeven Only |
| 13 | KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in unjform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications | Cum | 173.93 | 2100.34 | Two Thousand One Hundred Paise ThirtyFour Only |
| 14 | KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision | Sqm | 773.00 | 35.60 | ThirtyFive Paise Sixty Only |
| 15 | KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications. | Sqm | 2497.00 | 5.56 | Five Paise FiftySix Only |
| 16 | KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with | Cum | 38.65 | 7653.79 | Seven Thousand Six Hundred FiftyThree Paise SeventyNine Only |

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| 17 | KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications | Sqm | 3270.00 | 13.35 | Thirteen Paise ThirtyFive Only |
| 18 | Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) | Cum | 130.80 | 8967.62 | Eight Thousand Nine Hundred SixtySeven Paise SixtyTwo Only |
| 19 | KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications | Sqm | 103.10 | 477.25 | Four Hundred SeventySeven Paise TwentyFive Only |
| 20 | KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 – DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer. | Nos | 135.00 | 374.90 | Three Hundred SeventyFour Paise Ninety Only |

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| 21 | KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. | Cum | 67.17 | 6031.81 | Six Thousand ThirtyOne Paise EightyOne Only |
| 22 | KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications | Sqm | 88.44 | 1027.92 | One Thousand TwentySeven Paise NinetyTwo Only |
| 23 | KSRB 14.6 : Providing and laying heavy duty cobble stones interlock pavers, 60mm thick using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications. Specification No. KBS 60mm thick | Sqm | 1864.84 | 1171.43 | One Thousand One Hundred SeventyOne Paise FourtyThree Only |
| 24 | Supply and fixing of Retro Reflective Single Arrow Road Name Signboard of size 1600mm x 900mm made out of retro reflective sheeting conforming to Type XI standards of ASTM D 4956 - 09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4 mm thick Aluminium Composite Material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back support frame SS angle of 15mm x 20mm x 1.2mm, supported by 38mm OD stainless steel pipe all round in 304 grade and 2 nos of vertical posts of 50 mm OD stainless steel pipe of 202 grade firmly fixed to the ground by means of properly designed foundation of size 450mm x 450mm x 600mm in 1:1.5:3 ratio cement concrete. The background shall be blue in color with letters and border in white,the item includes earthwork excavation, cost of all materials, loading,unloading, lead, lift, transportation etc., complete. as per direction of engineer incharge of work clause 6.9 of IRC 67-2012 for Type XI retro reflective sheeting from the sheeting manufacturer & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro reflective sheeting offered shall be submitted by the contractor for technical qualification in the tender | Sqm | 2.88 | 14792.51 | Fourteen Thousand Seven Hundred NinetyTwo Paise FiftyOne Only |

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